



378549

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
ArcelorMittal Caustic Spill - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #1**
First and Final POLREP ArcelorMittal Caustic Spill, East Chicago, IN
ArcelorMittal Caustic Spill
B5ZD
East Chicago, IN
Latitude: 41.6840000 Longitude: -87.4229000

To: Thomas Crosetto, USEPA
 Linda Nachowicz, USEPA
 Jason El-Zein, USEPA
 David Chung, USEPA
 Charles Gebien, USEPA
 William Messenger, USEPA
 Jeff Kelley, USEPA
 Carol Ropski, USEPA
 John Maritote, USEPA
 Michael Chezik, DOI
 Ben Maradkel, Weston Solutions Inc.
 John Glover, USEPA
 Dave Greinke, IDEM
 Max Michael, IDEM

Vernetta Simon, USEPA
William Simes, USEPA
Jill Groboski, USEPA

From: Ramon Mendoza, On-Scene Coordinator
Date: 9/29/2010
Reporting Period: 9/23/10 to 9/23/10

1. Introduction

1.1 Background

Site Number:	B5ZD	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	9/23/2010	Start Date:	9/23/2010
Demob Date:	9/23/2010	Completion Date:	9/23/2010
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category - Emergency Response-Equipment Failure, Sodium Hypochlorite (15% mixture) above ground storage tank spill

1.1.2 Site Description

According to NRC Report #954907, an AST of Sodium Hypochlorite (15% mixture) encountered an equipment failure and approximately 6000-gallons was released on land (no secondary containment). No waterways were affected. The incident was identified on 9/23/10 at 0745 hrs CST by ArcelorMittal workers.

The ArcelorMittal facility is located in an industrial area of East Chicago, IN. The nearest waterway is Lake Michigan to the north and east. The nearest residential property is approximately 2 ½ mile to the south-southwest.

AcerlorMittal is a steel manufacturer. Its biggest customer is the auto industry.

1.1.2.1 Location

The spill location is at the ArceloMittal Indiana Harbor East facility located at 3210 Watling Street, East Chicago, IN. N 41.68400 Deg. , W - 87.42290 Deg.

1.1.2.2 Description of Threat

Approximately 6000-gallons of sodium hypochlorite (15% mixture) was released on a gravel surface cover (approximately 30'x100' area) and concret pad. There was potential for release into the air and surface water and exposure to onsite workers through inhalation and dermal contact.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

An approximate 30'x100' gravel surface cover area and AST concrete pad was impacted. The spill was diluted with water and the contents were pumped into a vacuum truck for disposal at ArcelorMittal's waste water treatment plant in compliance with their NPDES Permit.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

See previous sections

2.1.2 Response Actions to Date

US EPA OSC Ramon Mendoza and START member Ben Maradkel mobilized to the incident. According to ArcelorMittal employees (Tom Barnett, Simonne Benoit, and Kevin Lurtz), subsequent to the discovery of the spill at 0745 on 9/23/10, cleanup activities began. The spill area was diluted with water and the contents were pumped into a vacuum truck and the wastewater disposed at their NPDES Permitted waste water treatment plant.

To determine if there were any health risks in the ambient air, START performed air monitoring activities using a Chlorine ToxiRAE and MultiRAE.

The winds at the time of the spill were from the southwest up to 20 mph. The PEL for chlorine is 0.5 ppm and the IDLH for chlorine is 10 ppm. The readings during the cleanup activities were as follows: 1) Chlorine ToxiRAE: 0 ppm; 2) MultiRAE: VOC = 0 ppm, H₂S = 0 ppm, CO = 2 ppm, LEL = 0 ppm, O₂ = 20.9%.

No harmful levels of chlorine or other contaminants in ambient air were detected.

The cause of the spill is under investigation; however, it is believed that it was caused by possible pump failure. Since the AST does not have secondary containment, the spill went on the AST concrete pand and travelled to the gravel (slag) surface cover, gathering at a low point about 100 feet southeast of the pad. No storm sewers/catch basins are in this area and no waterways were affected.

□

As of 1400 hrs on 9-23-10, US EPA and START demobbed from incident due to cleanup activities being completed.

At the request of the USEPA OSC the facility collected soil samples of the impacted area to confirm cleanup complete. The results the ph to be at background.

Cleanup is complete.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

ArcelorMittal is the Responsible Party. The facility has a RCRA Haz permit and is Corrective Action Site with USEPA. Jill Groboski is the project manager for USEPA and will be notified of the response by POLREP.

2.1.4 Progress Metrics Not applicable

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities. ArcelorMittal completed field activities and is completing an incident report documenting the release and response. This report will be submitted to USEPA and IDEM as soon as possible.

2.2.1.1 Planned Response Activities

See section 2.2.1

2.2.1.2 Next Steps

ArcelorMittal will provide USEPA and IDEM with an Incident Report documenting the release, and response as soon as possible.

2.2.2 Issues

None

2.3 Logistics Section

Due to cleanup activities being completed, no additional personnel are needed for the response.

2.4 Finance Section

2.4.1 Narrative

The accounting of expenditures is an estimate based on figures known to the OSC at time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up to date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	\$10,000.00	\$1,200.00	\$8,800.00	88.00%
Intramural Costs				
Total Site Costs	\$10,000.00	\$1,200.00	\$8,800.00	88.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Safety Officer

START performed air monitoring activities using a Chlorine ToxiRAE and MultiRAE. The winds at the time of the spill were from the southwest. The PEL for chlorine is 0.5 ppm and the IDLH for chlorine is 10 ppm. The readings during the cleanup activities were as follows:

- Chlorine ToxiRAE: 0 ppm
- MultiRAE: VOC = 0 ppm, H₂S = 0 ppm, CO = 2 ppm, LEL = 0 ppm, O₂ = 20.9%

2.6 Liaison Officer

Not applicable

2.7 Information Officer

2.7.1 Public Information Officer Not needed.

2.7.2 Community Involvement Coordinator Not needed.

3. Participating Entities

3.1 Unified Command

Not applicable

3.2 Cooperating and Assisting Agencies

USEPA responded at the request of IDEM

4. Personnel On Site

1 USEPA OSC

1 START person

About 7 response personnel from the ArcelorMittal facility.

5. Definition of Terms

AST – Aboveground Storage Tank

CST – Central Standard Time

CO – Carbon Monoxide

H₂S – Hydrogen Sulfide

IDEM – Indiana Department of Environmental Management

IDLH – Immediately Dangerous to Life and Health

LEL – Lower Explosive Limit

O₂ – Oxygen

OSC – On Scene Coordinator

PEL – Permissible Exposure Limit

ppm – part per million

START – Superfund Technical Assessment and Response Team

US EPA - United States Environmental Protection Agency

VOC – Volatile Organic Compound

6. Additional sources of information**6.1 Internet location of additional information/reports**

Not applicable

6.2 Reporting Schedule

Not applicable

7. Situational Reference Materials

Facility provided MSDS for 15% Sodium Hypochlorite. MSDS is in the documents section of website.